



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/841,397	04/30/1997	SHINYA MATSUOKA	063170.6251	3144

5073 7590 10/17/2006

BAKER BOTTS L.L.P.
2001 ROSS AVENUE
SUITE 600
DALLAS, TX 75201-2980

EXAMINER

DINH, KHANH Q

ART UNIT PAPER NUMBER

2151

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/841,397

Applicant(s)

MATSUOKA, SHINYA

Examiner

Khanh Dinh

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3- 9, 11-18, 20-25 and 45-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9,11-17,24 and 45-48 is/are rejected.
- 7) ☒ Claim(s) 8, 18, 20-23 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/31/2006 has been entered.
2. Claims 1, 3- 9, 11-18, 20-25 and 45-48 are presented for examination.

Claim Rejections - 35 USC ' 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3-5, 7, 9, 11, 12, 13, 17, 24, 45-48 are rejected under 35 U. S. C. 103(a) as being unpatentable over Bruno et al U.S. pat. No. 5,710,591 in view of Cohen et al, IEEE 1993, "Virtual gain for audio windows."

As to claim 1, Bruno discloses an audio conference sever (ACS) for enabling an application program to provide multi-point (22a, 22b, 22c fig. I) comprising:

Art Unit: 2151

- means for managing at least one audio conference, said at least one audio conference comprising a plurality of audio clients (12a, 12b, 12c fig. I).
- means for receiving (MCU 26 fig. I) audio data from said plurality of audio clients (see fig. I and col.I lines 29-51).

Bruno does not specifically disclose mixing means for mixing said audio data to mix the audio data into spatialized audio data and the mixing means including attenuation operable to provide distance-based attenuation according to a plurality of functions, each sound decay function being associated with a respective audio client and a different volume/distance relationship. However, Cohen discloses mixing means for mixing said audio data to mix the audio data into spatialized audio data (using Cohen's audio mixers, for transferring data to multiple audio resources, see page 85, section 0.1) and the mixing means including attenuation operable to provide distance-based attenuation according to a plurality of functions (virtual gain is calculated by the effects of the distance between source and sink. In this case, Cohen discloses using sound sources as points reflect changes to the Virtual gains, see pages 87-88), each sound decay function being associated with a respective audio client and a different volume/distance relationship [i.e., the distance -dependent gain parameter used in MAW (moving source/moving sink) and listeners can alter these different parameters among the teleconfererees, see Cohen's section 1.2, distance dependent-gain and fig.3, pages 85-88]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize Cohen's

Art Unit: 2151

audio data mixer in Bruno's audio conference server to control the volume of a sound source and a listener because it would have allowed multiple simultaneous audio sources to coexist in a modifiable display without user stress (see Cohen's section 0.1).

As to claim 3, Bruno teaches checking the status of a registered owner of said at least one audio conference to determine whether said at least one audio conference still exists (detecting the location of a signal to identify at least one terminal device, see abstract and col.12 lines 20-52).

As to claim 4, Bruno further discloses checking means including a resource audit service (multiple control unit MCU 26 of fig. 1), said resource audit service operable when said at least one audio conference is generated by a first application and is being used by a second application (a presentation mode can be seen by other conferees, see abstract and col. 4 line 54- col.5 line 40).

As to claim 5, Bruno further discloses a plurality of audio clients includes set top box (STB) audio clients and point source audio (PSA) audio clients (audio sources and the participants of the teleconference, see col.7 lines 27-64).

As to claims 7 and 17, Bruno discloses an audio conference sever (ACS) comprising:

managing means for determining distance between a target audio client and a plurality of source audio clients (12a, 12b, 12c fig. 1). Bruno does not specifically disclose receiving means for determining a plurality of weight values for each of said source audio clients based on an identified decay function and a distance between each of said source audio client and a target audio client, wherein each of said weight values corresponds to a source/client pair, means for generating a mix table and an audio big decay function, an audio small decay function, an audio medium decay function and a constant decay function. However, Cohen discloses:

receiving means for determining a plurality of weight values for each of said source audio clients based on an identified decay function (distance-dependent gain parameter used in MAW, see Cohen's section 1.2) and a distance between each of said source audio client and a target audio client, wherein each of said weight values corresponds to a source/client pair (see Cohen's section 1.2, fig.3), means for generating a mix table (mixing board, see Cohen's section 0.1) for each source/client pair and means for calculating an actual mix (calculating parameters, see Cohen's section 0.1).

Cohen further discloses a continued gradual decay characteristics (see Cohen's fig.3). Therefore, Cohen inherently discloses an audio big decay function, an audio small decay function, an audio medium decay function and a constant decay function. Cohen further discloses said sound decay characteristic may take into account decay characteristics according to a sound's behavior (Virtual gain is calculated by the effects of the distance between source and sink. In this case, Cohen discloses using sound

Art Unit: 2151

sources as points reflect changes to the Virtual gains, see pages 87-88). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize Cohen's audio data mixer in Bruno's audio conference server to control the volume of a sound source and a listener because it would have allowed multiple simultaneous audio sources to coexist in a modifiable display without user stress (see Cohen's section 0.1).

Claim 9 is rejected for the same reasons set forth above for claim 1.

Claim 11 is rejected for the same reasons set forth above for claim 3.

Claim 13 is rejected for the same reasons set forth above for claim 5.

Claim 12 is rejected for the same reasons set forth above for claim 4.

Claim 24 is rejected for the same reasons set forth above for claim 7.

Claims 45 and 46 are rejected for the same reasons set forth above for claims 1 and 7.

Claim 47 is rejected for the same reasons set forth above for claim 1.

Claim 48 is rejected for the same reasons set forth above for claim 24.

5. Claims 6 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braun and Cohen as applied to claim 1 above, and further in view of Chau et al U. S. Pat. No.5,764,750.

As to claim 6, Braun and Cohen's teachings still applied as in item 4 above, but neither Braun nor Cohen discloses a providing program access to high level methods for creating and managing a proxy audio conference. However, Chan et al disclose a

Art Unit: 2151

providing program access to high level methods for creating and managing a proxy audio conference (see abstract, fig.2 and co1.5 lines 1-col.6 lines 35). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize Chau et al's proxy server in Braun's audio conference server because it would have provided the capabilities required of endpoints by the local system and its protocol in order to allow the local and the, remote endpoints to communicate with each other see Chau's summary).

As to claims 14-16, it is similar in scope as that of claim 6, and therefore is rejected for the same reasons set forth above for claim 6.

Allowable Subject Matter

6. Claims 8, 18, 20-23 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed on 8/9/2006 have been fully considered but they are not persuasive.

* Applicant asserts that the cited reference does not disclose sound decay function take into account decay functions according to a sound's behavior.

Examiner respectfully disagrees. Cohen discloses that the sound decay function takes into account decay functions according to a sound's behavior (the virtual gain is calculated by the effects of the distance between source and sink. As a result, Cohen discloses using sound sources as points reflect changes to the virtual gains, see pages 87-88) as rejected above.

Conclusion

8. Claims 1, 3-6, 7, 9, 11-17, 24 and 45-48 are rejected.
9. Claims 8, 18, 20-23 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Dinh whose telephone number is (571) 272-3936. The examiner can normally be reached on Monday through Friday from 8:00 A.m. to 5:00 P.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung, can be reached on (571) 272-3939. The fax phone number for this group is (703) 872-9306.

A shortened statutory period for reply is set to expire THREE months from the mailing date of this communication. Failure to response within the period for response

will cause the application to become abandoned (35 U. S. C . Sect.133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(A).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KHANH DINH
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100